DOCUMENT RESUME

ED 291 452 JC 880 133

AUTHOR Zilkowski, R.; Lucas, John A.
TITLE Feasibility of Beginning a Program in Business Information Management. Volume XV, No. 9.
INSTITUTION William Rainey Harper Coll., Palatine, Ill. Office of Planning and Research.
PUB DATE 30 Mar 87
NOTE 24p.
PUB TYPE Reports - Evaluative/Feasibility (142) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Administrator Education; *Business Education; Business Skills; College Programs; Community Colleges; Employer Attitudes; Feasibility Studies; Management Development; Management Information Systems; Managerial Occupations; *Middle Management; Occupational Surveys; Office Machines; Two Year Colleges; Vocational Education

ABSTRACT

In December 1986, a study was conducted at Illinois' William Rainey Harper College (WRHC) to determine the feasibility of beginning a Business Information Management (BIM) program aimed at the middle-management level. A survey was mailed to 795 organizations with 250 or more employees in neighboring counties, requesting information on the interest in the proposed program, starting salaries and job titles that would be offered to BIM program graduates, hiring requirements, and comments on the proposed curriculum. The study also examined characteristics of the companies, how they handled BIM, their level of automation, automation applications used by managers, plans for instituting BIM, use of word processing, and kinds of word processing packages used. Study findings, based on an 8.7% response rate, included the following: (1) the organizations interested in the proposed new program estimated that they would encourage 74 existing employees to enroll for a few courses, 27 to enroll in the certificate program, and 48 to enroll in the associate degree program; (2) the organizations indicated that they would hire 31 of WRHC's BIM associate degree graduates; (3) if the reported demand were spread over a 5-year period, the average semester headcount would be 44 to 100 (depending on course load) and the average semester full-time equivalent would be 40; (4) the median starting salary for those hired from the WRHC program would be $20,000; (5) 48.5% of the companies had a business information center; and (6) over 95% indicated that they used personal computers, and 88% used mainframe computers. Based on study findings, it was concluded that the proposed BIM program was very feasible. The survey instrument is appended. (UCM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

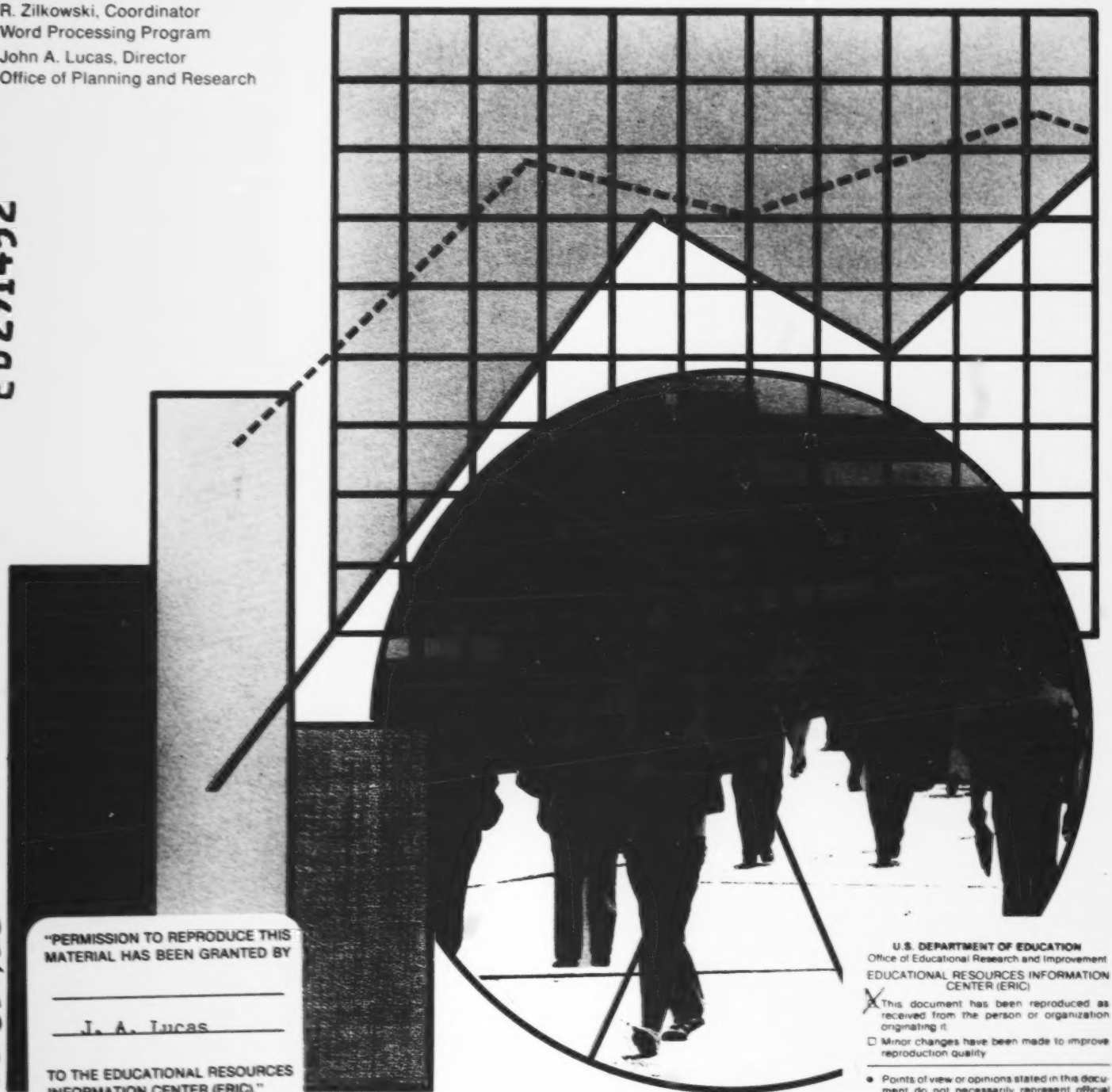
Office of Planning and Research

William Rainey Harper College

Feasibility of Beginning a Program in Business Information Management

Volume XV, No.9
March 30, 1987

R. Zilkowski, Coordinator
Word Processing Program
John A. Lucas, Director
Office of Planning and Research



ED291452

JC 880133

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. A. Lucas

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

A B S T R A C T

THE PURPOSE OF THIS STUDY WAS TO DETERMINE THE FEASIBILITY OF BEGINNING A PROGRAM IN BUSINESS INFORMATION MANAGEMENT AIMED AT THE MIDDLE MANAGEMENT LEVEL IN THE ORGANIZATION. SURVEYS WERE MAILED TO ALL ORGANIZATIONS WITH 250 OR MORE EMPLOYEES IN THE HARPER COLLEGE DISTRICT, LAKE COUNTY, THE OAKTON COMMUNITY COLLEGE DISTRICT, THE ELGIN AREA AND DUPAGE COUNTY. AFTER A MONTH, RESPONSES WERE RECEIVED FROM SIXTY-NINE ORGANIZATIONS

DEMAND FOR THE PROGRAM WAS DERIVED FROM ONLY THE RESPONDENTS AND IT WAS ASSUMED THAT THE NON-RESPONDENTS WERE NOT INTERESTED IN THE PROPOSED PROGRAM.

RESULTS OF THE SURVEY SHOWED THAT THE PROPOSED BUSINESS INFORMATION MANAGEMENT PROGRAM APPEARS TO BE VERY FEASIBLE. IT WOULD ENROLL FORTY FTE PER SEMESTER AND IF THE EIGHT NEW SPECIALIZED COURSES WERE OFFERED EVERY OTHER SEMESTER, THE AVERAGE CLASS SIZE WOULD BE ABOUT TWENTY-FIVE. A NUMBER OF COMMENTS WERE RECEIVED ABOUT THE PROPOSED CURRICULUM AND THERE WERE EIGHTEEN RECOMMENDATIONS OF NAMES TO SERVE ON THE ADVISORY COMMITTEE AND SEVEN NAMES FOR THE PART-TIME TEACHING FACULTY.

THE SURVEY INDICATED THAT MOST OF THE ORGANIZATIONS WERE ALREADY QUITE INVOLVED WITH BUSINESS INFORMATION MANAGEMENT SYSTEMS. THERE WAS A WIDE VARIETY OF TYPES OF PEOPLE ASSIGNED THE RESPONSIBILITY AND A WIDE VARIETY OF AUTOMATION APPLICATIONS.

TABLE OF CONTENTS

		Page
I.	Purpose.	1
II.	Population Surveyed.	1
III.	Methodology.	1
IV.	Discussion of Results.	1-2
V.	Conclusions.	2
VI.	Detailed Results	
	A. Demand and Interest in the Proposed Program.	3
	B. Starting Salaries Which Would be Offered These BIM Associate Degree Graduates	3
	C. Job Title of Associate Degree Graduates Hired.	4
	D. Requirements Companies have for Hiring People in Business Information Management.	4-5
	E. Comments about the Proposed Curriculum	5-7
	F. Employees Recommended who would be Interested in Serving on the Advisory Committee for this Program	7-8
	G. Employees Recommended who would be Interested in Teaching Part Time in the Program	8
	H. Information About Companies Surveyed	9
	I. How Companies Handled Business Information Management. . . .	9
	J. Responsibility for Business Information Management	10
	K. Title of Person in Charge of Business Information Management	11
	L. Level of Automation in the Company	11
	M. Automation Applications used by Managers	11-13
	N. Plans for Instituting Business Information Management in their Organizations	13
	O. Use of Word Processing	13
	P. Kinds of Word Processing Packages Used	14
VII.	Appendix	
	Cover Letter - Survey Instrument - Course Description	

PURPOSE

The purpose of this study was to determine the feasibility of beginning a program in Business Information Management aimed at the middle management level in the organizations. The study was requested by the Coordinator of the Word Processing Program at Harper College.

POPULATION SURVEYED

All organizations with 250 or more employees were identified in the Harper district, Lake County, Oakton Community College district, the Elgin area and DuPage County. A mail survey was sent to all 795 of these organizations. After a month, 69 organizations had responded for a 8.7 percent response rate. In this type of study the response rate is not important as the demand is based on only those responding. It is assumed that those not responding were not interested in the proposed program.

METHODOLOGY

The survey instrument shown in the appendix was developed by the Coordinator of the Word Processing Program with input from the Office of Planning and Research. A description of the proposed curriculum was included with the survey. No follow-up procedures were employed in this study.

DISCUSSION OF RESULTS

Organizations interested in the proposed new program in Business Information Management (BIM) estimated they would encourage 74 existing employees to enroll for a few courses, 27 to enroll in the certificate program and 48 to enroll in the associate degree program. In addition, these organizations indicated they would hire 31 of Harper's BIM associate degree graduates. If this demand was spread over a five-year period, the average semester headcount would be 44 to 100 (depending on course load) and the average semester FTE would be 40.0. Moreover, if all eight BIM courses were offered each semester, the average class would be 12.5; however, if each class was offered only every other semester, the average class size would rise to 25.0. Thus, the program appears to be large enough to be very feasible if the program is marketed in Lake County, Oakton district, Elgin, and DuPage County, as well as the Harper College district.

The median starting salary for those hired from the Harper program would be $20,000. Titles for the position would vary from data processing types to office automation manager or business information coordinator.

When asked in general what they would look for in hiring a business information manager, some were looking for a bachelor's degree, others for very technical data processing skills and others, broad communication/person skills. These organizations were also asked to comment on the proposed curriculum. Many indicated it was fine as it is, others felt a bachelor's degree is needed. Many indicated that more technical skills are needed while a few mentioned that additional communication or business courses are needed. These organizations recommended 18 persons to serve on the advisory committee for the program and

seven people to teach part time in the program.

Information was also gathered about the organizations themselves. About half indicated they have business information centers. They also described a number of ways of handling business information management in their organizations. These included incorporating the responsibility with the data processing or management information system or with the business office. Others assigned the responsibility to a specialist or a group of specialists. In still other cases, each individual office was left to come up with its own system. Over half the organizations assigned to a single person the overall responsibility for business information management. Job titles given to such persons vary widely.

In terms of level of automation, over 95 percent of the respondents indicated they used PCs and 88 percent used mainframe computers. Some 82 percent used remote terminals, 57 percent were involved with networking and 46 percent participated in electronic mail. Automation applications varied widely and included scheduling, budgeting, financial spread sheets, word processing, marketing analysis, planning and forecasting, product or technical analysis and many other types of applications.

Also among the responding organizations, over 92 percent report using word processing. Some 25 different word processing packages were reported being used. The most frequently used packages were Displaywrite, Wang, and Wordstar.

CONCLUSIONS

The proposed Business Information Management Program appears to be very feasible. It would enroll 40 FTE per semester and if the eight new specialized courses were offered every other semester, the average class size would be about 25. Numerous comments were received about the proposed curriculum and there were 18 recommendations of names to serve on the advisory committee and seven names for the part-time teaching faculty.

The survey indicated that most of the organizations were already quite involved with business information management systems. There was a wide variety of types of people assigned the responsibility and a wide variety of automation applications.

Results of Survey of Need for Educational Program in Business Information Management

Demand and Interest in the Proposed Program

Intent of existing employees who would be recommended to enroll in this program.	Headcount	FTE	All eight BIM Course Enrollment	Per BIM course enrollment
Would enroll for a few courses	74	29.6	148	18.5
Would enroll for a certificate	27	54.0	216	27
Would enroll for an associate degree	48	192.0	384	48
Sub-total	149	275.6	748	93.5
If spread out over five years Average per semester	32 to 69	27.6	74.8	9.35 if every BIM course offered each semester
BIM associate degree graduates from Harper who would be hired by these companies.	31	124.0	248	31
Grand Total Demand	180	399.6	996	124.5
If spread out over five years Average per semester	44 to 100	40.0	99.6	12.5 if every BIM course offered each sem.

Starting Salaries Which Would Be Offered These BIM Associate Degree Graduates

Starting Salary	N
$13,500	1
$16,000	1
$17,500	1
$20,000	2
$21,000	1
$22,500	1
$26,000	1
$35,000	1
	9

Three others responded: open, varies, unknown

Median Salary $20,000

Mean Salary $21,300

Job Title of Associate Degree Graduates Hired

Programmer/Analyst

Entry Level Analyst

Programmer Trainee

Business Analyst

Programmer Associate

Decision Support Analyst

Data Processing, Computer Operator

Currently restructuring our department titles.

Business Information Coordinator

Unknown

Data Processing Manager

Office Automation Manager

Requirements Companies have for Hiring People in Business Information Management

Good understanding of business, better than average interpersonal skills, analytical and a good problem solver.

Depends on position - we have an entry position with no experience necessary; other positions require previous experience on computers, PC's or word processors.

Might consider hiring one in next two or three years but would want a bachelors degree or higher with 2-3 years of experience.

BS degree in Computer Science.

Bachelors in Computer Science or one year of programming in business environment in Cobol or Fortran.

No formal outline at this time.

Good job skills, communication skills, personable.

Not defined.

None in foreseeable future.

Our requirements include technical expertise in computer systems which your program lacks.

College degree - personable, excellent communication skills written and verbal. Analytical self motivated.

Depends on assignment and responsibility of position. We look for experience or training that demonstrates ability to succeed in new areas.

Some practical experience in quantitive analysis and direct experience in department or function he applies for.

Four year degree; at least one year of related work experience.

Several years prior experience in systems design/operation/programming on a H/P 3000.

Programming/Analysis/Design/Project Planning/Control PC, Communications (DATA).

AA degree minimum for trainee spot.

Requirements Companies have for Hiring People in Business Information Management

This is done at the General Office in East Dubuque, Illinois.

Have some people that do BIM as a part of their total job. Have no people solely responsible for this function. Our main office is the place that uses more BIM people.

Depends on position hired for.

We promote from within therefore all requirements are for entry level position. Education requirements preferred are BS, BBA.

We already have a technical specialist.

Information systems and business (specifically health care) training.

Usually a bachelors in Computer Science.

College - four year - trained.

Currently we are only hiring data processing types.

This is taken care of at our corporate office in New York City.

It depends if they are on the technical or business side. If the business side; analytical ability, oral and written communications.

Because of substantial difference in our view/approach - as compared to your description - I'm reluctant to define any specific requirements.

BS in Computer Science, Business major or vise versa; BS Math/Business, otherwise related experience with or without a degree whether from outside or inside the company.

IBM computer programming instruction.

We are a temporary service and hire people at all levels who work as temps and gain experience and confidence.

Corporate does hiring - we use our corporate personnel to fill positions.

Strong Cobol or experience with Wang Minicomputers and "BASIC".

Bachelor of Science

Data Processing background or significant business experience with computing in their background also. We do not hire inexperienced individuals into this kind of function.

Experience - 2

Four year degree

Comments About the Proposed Curriculum

Is DPR 200 basic? Spread sheets in some form would help.

I would need a more detailed description of courses. Is quantitive methods included? Methods for forecasting and planning, i.e., regressive analysis.

Course descriptions are needed to identify learning objectives and content.

Looks good to me - 4

It is very complete.

I don't have enough background to evaluate. Looks OK from what I know.

Comments About the Proposed Curriculum

Require level of Math before getting in program. Instead of an elective in the second year or Math, have a course in information and control requirement of production, sales, marketing, etc. Instead of Humanities, have course in business letter and report writing. Have a course in major manufacturing equipment and how to operate. In class, make them work on H/P, IBM and DEC equipment.

Emphasize architectures - data, hardware, communications, software - connectivity. IS/OA analysts must be able to communicate (verbal and written), have teaching skills and an awareness of behavioral/organizational change to be successful, technical must be accepted/implemented by an organization (sales and politics!). Hardware/software evaluation/acquisition - cost justification. End-user languages, PC and applications, systems analysis and design, OA tools - E-Mail, Voicemail, Word Processing, etc.

Flow charting ability to actually use a PC and some software. Some possible knowledge of JCL, LAN networks. Perhaps another course in training and development.

Emphasize "super micro" based systems.

It seems fairly basic. Without knowing your target market it is difficult to comment.

Would be good to have evening classes for people who are working.

Proposed curriculum appears to have appropriate focus. Continuous updating to meet current trends will be important.

Appears to be very good.

A need to address the security of the system and information.

It appears there could be more emphasis on the business aspects - as analysis of business information (regardless of the technology used).

As a small manufacturing division, we do not have the need for this type of position. I would expect it could be useful for insurance, banking, etc. where significant data input must be processed.

I would question the need for keyboarding skills. Why not just acquire while completing course? You should consider requiring business writing and/or report writing.

I have difficulty accepting the definitions/view expressed in the cover letter. As a result, I can't offer meaningful comments.

The addition of courses such as Technical Writing and Introduction to Operating Systems would be beneficial.

More Cobol and Wang Microcomputer experience is useful to us. Also CICS helpful.

More financial courses, forecasting/modeling.

Looks like a curriculum that can be used by many non-data processing personnel.

Could be use a little more business management and an overview of the typical business functions.

Classes on Personal Computers.

Curriculum should have some management as it pertains to personnel.

Comments About the Proposed Curriculum

Does not appear to offer adequate technical depth. We normally do not hire in this area without at least a 4 year undergraduate degree with technical orientation.

On the surface, this does not appear to be in depth enough for the kinds of skills required to perform this kind of function in an organization.

Try to arrange for a work/study component so the students can get on the job experience/possible income.

Cannot evaluate a curriculum from a course title.

I believe that the enclosed curriculum is excellent.

Programming is still considered to be entry level position for someone just out of school with no previous job experience. While your current curriculum is useful for higher level jobs, more technical courses in such areas as programming, PC's, databases, and system software would be helpful in getting your graduates an initial position.

Maybe a marketing course or finance course should be included in the curriculum.

It appears to be nontechnical - a company our size (300 people) cannot afford these "middle men" - here you are DP (technical) or a user. Design and implementation of an automated system is performed by DP and user personnel as a team.

DPR 200 Intro to Business Computer Programming is of questionable value. Office Automation to be successful must eliminate traditional programming needs.

Employees Recommended Who Would Be Interested in Serving on the Advisory Committee for this Program

Trudy Norman
Director
Advanced System Applications
One ASA Plaza Box 385
Bloomingdale, IL 60108

M.D. Wiley
Personnel Rep.
American Airlines
1699 Wall St.
Mt. Prospect, IL 60056

Jim Logan
Manager, End-user Consulting
George Swanson
Manager, Office Automation
Fred Schulman
Section Manager Training
and Development
Baxter Travenol Laboratories
One Baxter Pkwy.
Deerfield, IL 60015

Wayne Brown
Director Information Services
CF Industries Inc.
Salem Lake Dr.
Long Grove, IL 60047

Dean Belin
Kathy Imhoff
CR Industries
900 N. State St.
Elgin, IL 60120

Becky Lobosco
Minicomputer Specialist
Mt. Prospect State Bank

Claudette Nowell-Phillips
Manager Human Resources Development
Curt Lesher
Manager Pharmacy
Good Shepherd Hospital
450 W. Hwy. 22
Barrington, IL 60010

Elizabeth Lopez
Home Office Operations Officer
Kemper Group
Rte. 22 at Kemper Dr.
Long Grove, IL 60049

Dave Hill
Human Resource Manager
Libby-Owens Food Co.
500 N. Hough St.
Barrington, IL 60010

Employees recommended Who Would be Interested in Serving on the Advisory Committee for this Program

Nancy Africh (4 vear program)
Systems Instructor
North Shore Gas Co.
3001 Grand Ave.
Waukegan, IL 60085

Paul Gross
Manager Decision Support Systems
Rust-Oleum Corp.
11 Hawthorne Pky.
Vernon Hills, IL 60061

Norene Lampe
Director of Information Systems
Al Nass
Manager Data Processing
Sherman Hospital
934 Center St.
Elgin, IL 60130

Jack Nitzkin
Vice President Finance
Skokie Valley Hospital
9600 Gross Point Rd.
Skokie, IL 60076

Paul M. Woessner
Vice President of Administration
The SEC Companies
1000 Jorie Blvd.
Oak Brook, IL 60521

Employees Recommended Who Would be Interested in Teaching Part Time in the Program

Kevin Deardorff
Analyst
CAI
550 W. Northwest Hwy.
Barrington, IL 60010

Dan Duffy
CR Industries
900 N. State St.
Elgin, IL 60120

Becky Lobosco
Minicomputer Specialist
Mt. Prospect State Bank

Sue Kostro
System Analyst/Programmer
Rockwell International
1431 Opus Pl.
Downers Grove, IL 60515

Paul Gross
Manager Decision Support Systems
Rust-Oleum Corp.
11 Hawthorne Pkwy.
Vernon Hills, IL 60061

Norene Lampe
Director Information Systems
Sherman Hospital
934 Center St.
Elgin, IL 60130

William Maurer
Director Corporate Systems Development
MIS
Walgreens Co.
200 Wilmot Rd.
Deerfield, IL 60015

INFORMATION ABOUT COMPANIES SURVEYED

	N	PCT
Companies having a Business Information Center	33	48.5
Companies not having a Business Information Center	35	51.5
	68	100.0

How companies handle Business Information Management

- This function is integrated within the MIS
- Today, BIM, is not a centrally coordinated function. Individual department managers are currently addressing opportunities individually.

- Carefully! Coordinate through special "Assistant to CEO" and MIS.
- Decentralized by department or function. Some information, i.e., payroll, employee information are housed in a centralized library.
- It is shared through the Information Services staff.
- Corporate Headquarters
- Using departments, responsible, overall direction of CEO
- Responsibilities are split between two managers: 1)Information Processing and Office Automation, 2)Business Systems and Programming
- Business Information Management is the same as MIS, as IS, as IRM - same idea/need/requirement only recycled in different clothing!
- Unclear as to what you are asking
- The Information Center handles both the mainframe and microcomputers used in end user computing. They also coordinate support and training.
- Main office with computers.
- Our corporate office gives direction - also has an information center - really more of a library.
- Person in charge works with managers to develop processes needed and training required.
- Computer
- Through coordination of application development, advanced development, and office automation groups
- Informal - under controller's direction
- Done in corporate home office.
- Strategic planning, tactical planning, steering committee, operating committee, large mainframe computer application, microprocessors and LAN's
- Service Bureau
- Through our data processing department
- Obtain input and recommendations of management staff
- In-house trainers
- Information comes from headquarters
- Through reports and data generated from the Finance Department
- Management Information System (MIS) department services manufacturing, merchandising, four financial areas using ADR database on IBM 4300 series mainframe
- Business infomration is primarily handled through the use of time sharing computer system - All financial information is available to those in need of it.
- Internally each department handles own.
- Two departments - accounting and small parts sales
- We are in an on-line environment - information is input and received through remote terminals.

How companies handle Business Information Management (continued)

- Broad availability, levels of information limited by access need and security clearance - clearance security changed on regular and irregular basis
- We have several units carry out the functions, but basically have a distinction between the tehnical aspects and the applications or business aspects.
- Disseminated on need-to-know basis
- Spread throughout the organization
- Traditional data processing department
- 1)A central library function for commercial sources, 2)Each functional unit of business is responsible for information elements "owned" by it.
- Mainframe system handled by data processing/MIS department - In addition, finance manages their own PC network (IBM).
- Through computer networking, specialized training areas including the information center, help disk, specialized functions within Information Systems Departments, etc. Various non-automated requirements are handled through procedure manuals through seven company areas.
- Either each brnach manager does independently or it comes from corporation
- Central office daily mail
- Issuance of automated financial statements - Circulization of appropriate articles from Wall Street Journal, New York Times, Washington Post with comments by our in-house economist.
- The information systems department evaluates, selects, and implements various hardware and software tools. We then provide training and consulting to all user departments for their use in information management.
- Telphone mail
- Corporate information and computer services headed by vice president responsible for strategic planning, hardware/software selection, networking, application development, operations.
- Information systems department which encompasses data processing, word processing and office auotmation - do not have direct responsibility as yet for telecommunications or centralized microfich.
- By individual support department within the hospital
- Through our normal data center personnel who handle design and implementation of new and existing systems
- IBM
- Corporate data processing department, computer steering committee consisting of vice president of data processing and representatives from executive committee, support at Barrington by local data processing department.
- Various reports from our computer data base - Personnel records and financial information is regular report types.
- Internal meetings with various department heads, controller and executive vice president present
- Assigned to various individuals within the Information Systems Department
- Departmental basis
- Each organization/operational group has their own MIS

Responsibility for Business Information Management

	N	PCT
Someone is designated for this function	38	58.5
Someone is partially designated for this function	2	3.1
No one is designated for this function	25	38.5
	65	100.0

Title of person in charge of
Business Information Management

- Director of MIS - 3
- Manager of Data Processing - 3
- Vice President of Information Services Group - 2
- Assistant to CEO and MIS
- Manager, End-User Consulting
- CEO - has MIS reporting to him
- Director of Information Services
- Dan Duffy
- Database Manager
- Director of Administrative Services
- Controller
- Director of Office Automation
- Systems Administrators
- Director of Data Processing
- Corporate Security and Information
- Director of Systems and Planning
- Assistant Vice President, Information Systems
- Director, Information Resource Management
- Corporate Office
- Assistant Vice President, Information Services
- Office Automation Manager
- Decision Support Systems Manager
- Vice President of Operations
- Director of Information Systems
- Systems and Programming Manager
- Data Center Manager
- Business Information Management System
- Vice President Corporate Information Services
- Vice President of Administration
- Executive Vice President
- Manager, Information Systems
- Program Manager
- Manager, Information Resource Management

Level of Automation in the Company	N	Percent of 68 Responses
PC's	65	95.6
Main-Frame Computer	60	88.2
Remote Terminals	56	82.4
Networking	39	57.4
Electronic Mail	31	45.6

Automation Applications Used by Managers

- Scheduling, budgeting, personnel actions, recruitment, selected analysis, program identification
- Forecasts and planning in various departments, sales and marketing, aircraft planning
- Sales/marketing analysis, planning and forecasting
- Word processing, budgets, spreadsheets
- Information

Automation Applications Used by Managers (continued)

- Financial spreadsheets, word processing, scientific computations, manufacturing control
- Planning, financial, manufacturing, distribution, marketing/sales, legal
- Mail, message transfer information, store and evaluate information, data manipulation organizational charting, order entry, etc.
- Budgets, misc. tracking and organizing
- Branch information, customer profiles, vendor profiles, purchasing, sales planning, and follow-up
- Word processing, budget planning, budget printouts, mailing lists, inventories, payroll, accounting, receipts payable and receiving
- Materials management, labor input, accounting, drafting and design, word processing
- Manufacturing and finance
- All major business functions
- Order, receivable, inventory status
- Typical MIS, all accounting and many tax reporting functions
- Financial primarily i.e., payroll, G/L, A/P, budget, cost accounting, purchasing
- Handling customer information - sending memos electronically - reports
- Periodic reports - operating results unit, district, region and corporate availability, personnel inventories, inventory management, general information communications
- Electronic mail, personal computing, calendaring, mainframe data access and manipulation
- Primarily reporting - considering base code input for labor reporting and material movement in 1987.
- Planning, forecasting, management reports
- We are a natural gas pipeline. Pipeline pumping stations are automated. Some remote metering is automated. Chart reading is automated.
- Customers accounting, general accounting, property accounting, auditing, engineering, distribution, stockholders, word processing, training, gas control, etc. Automation involves 100's of applications across all areas of company operations.
- Financial forecasting and tracking material, tracking/inventory records, planning/forecasting
- Payroll/AP/general ledger/human resources/budgeting/sales distribution/ salary forecasting/manpower reporting
- Insurance and financial systems
- Very diversified
- Business (order entry, manufacturing, financials) applications, some engineering applications, also
- All types of business applications
- All of the above
- Operational and financial management, decision support
- Patient care, clinical applications in laboratory, radiology, cardiology, pharmacy, accounting (GL, PA, AR, AP, etc.) Word processing
- Reports
- Coding procedures, accounting, recording finding in clinics and laboratories
- Order entry, inventory management, financial, customer service, payroll human resources, automated warehousing, return goods, accounts receiveable, etc.
- Networking, E-mail and distribution of financial reports from various systems
- All
- Budgeting, financial analysis
- Financial information primarily
- Accounting, invoicing, inventory, accounting receivable/payable, payroll, scheduling, general ledgers

Automation Applications Used by Managers (continued)

- Financial planning, market analysis and market strategies
- Accounting, payroll, word processing, engineering calculations, inventory management
- Management review of inventory levels, sales, receivables, shipping statistics, contract status, pricing
- General word processing useage on personal computers - spreadsheets applications in limiated areas
- OLI's, some tracking, some electronic mail (primarily done by administrative aides)
- Text processing - database applications - decisions support - spreadsheets - project planing - training
- Financial
- Use very little
- MRP, P and L, payroll, accounts payable
- Varies from department to department. HR uses Cyborb, HRIS applicant tracking, SAL6, Telemail
- Word processing, E-mail
- Financial control, personnel contract, payroll, general ledger
- Inventory control, customer order status, production order status, production order planning, etc., spreadsheets and word processing on PC's
- Various, mainly global sales look up, financial, and electronic mail
- Operational responsibility review - i.e., actual to budget analysis. Order entry for patients services, interdepartmental communications for results reporting

	N	PCT
Organizations where managers use PC's	63	91.3
Organizations where managers do not use PC's	6	8.7
	69	100.0

Plans for instituting Business Information Management in their organization	N	PCT
Already have system	38	55.0
Next six months	3	4.3
Six months to a year	5	7.4
One to three years	13	18.8
Never	6	8.7
Plans unknown	4	5.8
	69	100.0

Use of Word Processing		
Organizations using word processing	63	92.6
Those not using it	5	7.4
	68	100.0

Kinds of word processing packages used	N	PCT of 68 Respondents
Displaywrite	19	31.7
Wang	18	30.0
Wordstar	17	28.3
Multimate	12	20.0
Word Perfect	11	18.3
WordStar 2000	8	13.3
Microsoft	4	6.7
PFS Write	4	6.7
NBI	3	5.0
Q and A	2	3.3
IBM Text Management System	2	3.3
Digital - Rainbow	1	1.7
Symphony	1	1.7
Smart	1	1.7
Sony Series 35	1	1.7
IBM Writing Assistant	1	1.7
First Choice	1	1.7
PC Write	1	1.7
Burroughs SWP-4	1	1.7
IBM 8100	1	1.7
IBM 55220	1	1.7
Lexitron	1	1.7
Honeywell	1	1.7
New Word	1	1.7
Locally developed/mainframe	1	1.7
Use many systems	3	5.0

A P P E N D I X

- Cover Letter
- Survey Instrument
- Course Description

William Rainey Harper College
Algonquin and Roselle Roads
Palatine, Illinois 60067
312-397-3000

December 1986

Dear Chief Information Officer:

Information automation has had an impact on the very structure of how work is accomplished. Business Information Management affects information creation, processing, and distribution. Everyone is affected by information--from support staff to the chief executive officer to the consumer who uses the service or product offered by the organization.

Business Information Management is the business function related to the coordination and management of the information resources of an organization. Generally the Business Information Management function includes responsibilities for planning, selecting, designing, implementing, training for, and evaluating automated and non-automated office systems.

The need for Business Information Management specialists is nationwide. Nationally, information automation is a $5 billion per year high growth industry that impacts nearly every public and private organization. Arthur D. Little, Inc., forecasts that the market will increase to $50 billion by 1990. Reasons for the growth are the soaring costs of white collar work and the recent technical potential for significant savings. White collar workers comprise 53 percent of the adult workforce today and account for 70 percent of the total industrial payroll, some $1 trillion per year. Booz, Allen, and Hamilton, Inc., estimate this will rise to $1.5 trillion by 1990.

Studies show that white collar productivity can be increased by 9.5 percent through information management beyond word processing. The potential savings of $95 billion shows an average payback of 15 months, according to the White Collar Productivity study by the American Productivity Center.

Employers cannot overlook these savings. Many of the jobs that will become available do not exist today under the current title available.

William Rainey Harper College in Palatine with the help of a Citizen's Advisory Committee has put together a 2-year program and a 30-hour certificate to meet these needs.

Would you take a few minutes of your time to look over the proposed curriculum and answer the questionnaire. Your answers will help determine our next course of action in getting state approval.

Sincerely,

Robert R. Zillowski
Professor of Business

jpd

SURVEY OF NEED FOR EDUCATIONAL PROGRAM

IN

BUSINESS INFORMATION MANAGEMENT

This number _____ identifies you and when we receive your completed survey enables us to remove your name from the mailing list so you will not be bothered with the second mailing of this survey or a follow-up call.

Please examine the enclosed description of the proposed curriculum for Business Information Management, complete the following survey and return the material in the enclosed self-addressed envelope.

1- Do you have an Information Center? Check (✓) one.

_____ A. Yes
_____ B. No

2- How do you handle Business Information Management?_____

_____

_____

_____

3- Is someone in your organization in charge of Business Information Management? Check (✓) one. _____ A. Yes
_____ B. No

If Yes, please give title_____

4- What is the level of automation in your company? Check (✓) all that apply.

_____ A. Main-Frame Computer
_____ B. Remote Terminals
_____ C. P.C.'s
_____ D. Networking
_____ E. E-Mail

5- If you have automation, for what kinds of applications is it used by managers?

_____

_____

_____

6- Do you have managers or professionals using P.C.'s? Check (✓) one.

_____ A. Yes
_____ B. No

7- When do you plan to institute Business Information Management in your organization? Check (✓) one.

_____ A. Next six months
_____ B. Six months to one year
_____ C. One to three years
_____ D. Never

8- What comments do you have about the proposed curriculum which is attached? Do you have any suggestions or modifications?_____

_____

_____

_____

9- How many of your employees would you recommend enroll in the Business Information Management Program at Harper? Put the number by the appropriate description.

_____ A. Enroll for a few courses

_____ B. Enroll for the Certificate

_____ C. Enroll for the Associate Degree

10- How many associate degree graduates in this proposed program (if it existed) at Harper would you hire in the coming year? A. _____

What would be their starting salary? B. _____

What would be their job title? C. _____

11- What requirements do you have for hiring people in Business Information Management? _____

_____

_____

12- Do you have any employees you would recommend who would be interested in serving on the advisory committee for this program?

Name _____ Job Title _____

Name _____ Job Title _____

Name _____ Job Title _____

13- Do you have any employees you would recommend who would be interested in teaching part time in the program?

Name _____ Job Title _____

Name _____ Job Title _____

Name _____ Job Title _____

14- Do you have word processing in your organization? Check (✓) one.

_____ A. Yes

_____ B. No

15- If YES, what kinds of word processing software do you use? Check (✓) all that apply.

_____ A. Wang

_____ B. Word Perfect

_____ C. Displaywrite

_____ D. Wordstar

_____ E. Multimate

_____ F. Wordstar 2000

_____ G. Other (Please Specify) _____

_____

THANK YOU ---

ASSOCIATE DEGREE PROGRAM

for

BUSINESS INFORMATION MANAGEMENT

FIRST YEAR	Credit
BIM-170 - Intro to Information Systems and Technologies*	3
MATH Elective[1]	3
ACC-101 - Principles of Accounting I	3
ENGLISH - Requirement[2]	3
MGT-167 - Records Management	3
	15
BIM-175 - Information Systems and Planning	3
BIM-180 - Information Systems Implementations	3
ENGLISH - Requirement[2]	3
ACC-102 - Principles of Accounting II	3
MATH Elective[1]	3
	15

SECOND YEAR	
HUMANITIES Elective	3
BIM-210 - Information Systems Applications	3
BIM-240 - Telecommunications	3
Social Science Elective	3
DPR-200 - Introduction to Business Computer Programming	4
	16
BIM-220 - Integrated Information Systems	3
BIM-250 - Administration Communication	3
BIM-260 - Training and Development in Information Systems	3
Social Science Elective	3
Elective[3]	3
	15

A certificate in this program could be achieved by taking the eight BIM courses shown above along with six hours of electives in management or accounting.

* It is recommended that the program participants have keyboarding skill. SEC-110 is recommended for those who cannot keyboard.

1- MTH-103, MTH-124, or MGT-225

2- ENG-101, ENG-102, ENG-103, ENG-130, JNM-130 and SPE-101 may be used.

3- These electives require approval of the coordinator.

SOME SPECIFIC JOBS FOR PEOPLE WITH SKILLS

IN

BUSINESS INFORMATION MANAGEMENT

High-Level Positions:
- Administrator for Information Management
- Director of Office Automation
- Director of Information
- Information Resource Manager or Director, Information Resource Management
- Training Director for Information Systems
- Information Policy Manager
- Information Database Manager
- Information Systems/Library Administrator (Director)

Mid-Level Positions:
- Office Environment Specialist
- Technical Support Specialist (provides support for management and support staffs)
- Trainer/Course Designer
- Software Specialist
- Technical Information Specialist
  - -- Local Area Networks
  - -- Storage/Retrieval (optical disks)
  - -- Video Conferencing and Computer Conferencing
  - -- Decision Support Systems
  - -- Graphic Display Systems
  - -- Electronic Mail
  - -- Voice Processing
  - -- Tracking Systems
  - -- Database Integrity
- Management Analyst (Communications/Information)
- Disaster Recovery Specialist
- Security Specialist (Tempest, etc.)
- Image Processing Specialist
- Quality Assurance Analyst (responsible for the audit and testing of new information systems and for documentation and procedures consultant)
- Computer/Information Systems Consultant
- Office Automation Consultant

Operational Staff

Janice Cook - Secretary
Linda Pones - Mailing, Tabulation

ERIC Clearinghouse for Junior Colleges APR 29 1988

William Rainey Harper College
Algonquin and Roselle Roads
Palatine, Illinois 60067